

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

•• REMARKS/ARGUMENTS ••

The Official Action of October 5, 2004 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment independent claim 1 has been changed to recite that: 1) the wings have inner and outer exposed surfaces; 2) the fastener sections are formed on the inner exposed surface of the wings; and 3) the plurality of fine fusion spots are located on the inner exposed surface of the wings.

This change to the claim was made in view of the Examiner's previous statement that the Kline et al. reference "does not, however, expressly disclose that the fine fusion spots are located on the *inner exposed surfaces* of the wings."

After carefully reviewing the last Official Action there seems to be some confusion as to the Examiner's reference to "inner" and "exterior" surfaces.

It seems as though, in relying upon Kline et al., that the Examiner is considering the facing surfaces of the laminated structure of Kline et al. shown in Fig. 7 as being "inner surfaces," i.e. surfaces that are inside the laminated structure, while the opposite "exposed" surfaces seem to have been interpreted by the Examiner as "exterior" surfaces.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

In applicants' disclosure the "inner" surface would be the same as what is conventionally called the "body-side" surface and the "outer" surface would be the opposite surface of the overall article.

Note, applicants' never used the term "exterior" surface until the Examiner indicated in the Official Action of March 9, 2004 that applicants' arguments were not commensurate with the scope of the claim, because the claims did not recite that the fusion spots were formed on the "exposed" surface of the wings.

Applicants' attempted to adopt the Examiner's convention and amended claim 1 to recite that the fusion spots were formed on the "exposed" surface of the wings.

This amendment lead to further confusion.

In order to clarify the structure of the present invention applicants' have amended claim 1 to recite that: 1) the wings have inner and outer exposed surfaces; 2) the fastener sections are formed on the inner exposed surface of the wings; and 3) the plurality of fine fusion spots are located on the inner exposed surface of the wings.

Thus in addition to reciting that the wings have inner and outer "exposed" surfaces, independent claim 1 requires that the fastening means and the fine fusion spots are on the same surface, i.e., the inner exposed surface of the wings. Kline et al. does not teach such a structure.

Claims 1-6 are pending in this application.

Claims 1-6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,957,908 to Kline et al.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

In relying upon Kline et al. the Examiner has stated the following:

With respect to claims 1, 3, 4 and 6, Kline discloses a disposable diaper 20, as shown in figure 1, comprising a topsheet 24, a back sheet 26, a liquid absorbent core 28, a front waist region 46, a rear waist region 44, a crotch region 48, and wings 62 and 64 formed on the rear portion and extending outward. Fastener sections 30 are formed on the wings 62 and 64 and extend outward, the fastener sections 30 having male fasteners formed on and extending from their inner surfaces, as shown in figure 7. The wings 62 and 64 comprise a nonwoven fabric made of thermoplastic synthetic fibers, as disclosed in column 15, lines 29-67. A plurality of fine fusion spots 250 are formed on [the inner surface of] the wings and arranged such that there is a greater number of fine fusion spots per unit area in the outer side regions 253 of the wings 62 and 64 than in the inner regions 254. The plurality of fine fusion spots 250 are formed by heat or pressure bonding, as disclosed in column 16, lines 28-29. Fine fusion bonds formed by these methods will inherently leave fine fusion spots on the exterior surface of the wing, since the application of heat or pressure to the wings to form the bonds will alter the exterior surface of the wings in the process. The area comprising the greater number of fine fusion spots 250 comprises the area extending from the inner transverse edge of the male mechanical fastener strips 30 inward over a transverse distance that is at least equal to the width of the male mechanical fastener strips 30, as shown in figure 7. Kline disclosed the wings 62 and 64 being made of a laminate of two layers, wherein the layers are bonded at spots 250 using methods such as heat, pressure or ultrasound (column 16, lines 28-30). It is the examiner's position that it is impossible to laminate two sheets together using a heating method, pressure method, or ultrasonic method from a non-exposed surface, or from the inside. It is therefore inherent in the method of fusing that when laminating two pieces of material using heat, pressure, or ultrasonic means, the fusion spots must be formed on the outside surface of at least one of the layer.

Kline does not, however, expressly disclose that the fine fusion spots are located on the inner exposed surfaces of the wings. At the time the invention was made, it would have been an obvious matter of design choice to one of ordinary skill in the art to have the fine fusion spots on the inner exposed surfaces of the wings because the applicant has not disclosed that having the fine fusion spots on the inner exposed surfaces of the wings solves any stated problem or serves any particular purpose. One of ordinary skill in the art would furthermore have expected Applicant's invention to perform equally well with either the fine fusion spots disposed on the outer surface or the claimed inner surface, as the fine fusion spots of both Kline and the instant invention serve the same purpose and perform the same

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

function of providing increased strength and stiffness in areas of the bonds. It would have been an obvious matter of design choice to modify Kline to obtain the invention as specified in claim 1.

In the above cited portion from the Office Action of October 5, 2004 the portion that is bolded and bracketed has been deleted from a similar portion of the Office Action of March 9, 2004. Also, the portion that has been bolded and underlined has been added from the similar portion of the Office Action of March 9, 2004.

It is noted that the Examiner has completely changed positions in that, in the Official Action of March 9, 2004 the Examiner stated that Kline et al. taught spots 250 are formed on **the inner surface** of the wings, whereas in the Office Action of October 5, 2004 the Examiner has stated that Kline et al. taught spots 250 are formed on **the exterior surface** of the wings.

The Examiner's position is inconsistent and is believed to be attributed to manner in which the Examiner is interpreting the laminated structure of Kline et al. inconsistently with applicants' disclosed and previously claimed structure.

On page 4 of the Official Action of March 9, 2004 the Examiner stated that:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the fine fusion spots being located **on an exterior surface** of the wings) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claim. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Kline discloses fine fusion spots located **on the inner surface** of the wing, as shown in figure 7.

Clearly the Examiner's position was that Kline et al. discloses fine fusion spots located on **the inner surface** of the wing.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

Applicants' specifically relied upon the Examiner's position and statements in the Official Action of March 9, 2004 when they amended independent claim 1 to recite that were located on the exterior surfaces of the wings.

That is, applicants attempted to adopt the Examiner's reference frame, based upon the Examiner's interpretation of the laminated structure of Kline et al.

However, applicants' reference to "inner" and "outer" surfaces and the Examiner's reliance on Kline et al. and reference to "inner" and "exterior" surfaces are not compatible because each of applicants' "inner" and "outer" surfaces would be "exterior" surfaces using the Examiner's frame of reference and interpretation of Kline et al.

Accordingly, independent claim 1 has been change to recite inner and outer "exposed" surfaces of the wings. This reference to "exposed" surfaces is believed to be compatible with the Examiner's interpretation of Kline et al., inasmuch as the Examiner states that Kline et al. "does not, however, expressly disclose that the fine fusion spots are located on the *inner exposed surfaces* of the wings."

In response, and completely contrary to the Examiner's previous position that Kline et al. did not teach fine fusion spots located on the inner surface of the wings (See Official Action of March 9, 2004, page 4), the Examiner now takes the position that fine fusion spots are located on the exterior surface of the wings.

The issue of the location of the fine fusion spots needs to be determined and settled for the prosecution to go on in the application.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

In both the Official Action of March 9, 2004 and October 5, 2004 the Examiner concedes that:

Kline does not, however, expressly disclose that the fine fusion spots are located on the inner exposed surfaces of the wings.

Applicants have herein attempted to use the Examiner's reference to "exposed" surfaces to distinguish over the manner in which the Examiner is interpreting Kline et al.

The question is, whether Kline et al. teaches that the fine fusion spots are formed on the inner "exposed" surface of the wings.

The Examiner theorizes that because Kline et al. teaches laminating the two sheets together that form the wings using heat, pressure or ultrasound, "the fusion spots must be formed on the outside surface of at least one of the layer."

Kline et al. teaches that:

The laminate may be bonded by any means known in the art for joining layers of a laminate. Examples of suitable bonding means include, but are not limited to, heat, pressure, ultrasound, adhesive, cohesive and coextrusion.

The methods Kline et al. teaches for bonding the laminate may well not form any visible bonding structures on either outer surface of the laminate. It is pure conjecture on the Examiner to take such a position. Note for example, ultrasound bonding will occur where the layers contact one another at the interface. Likewise adhesive bonding can certainly be contained between the layers. Cohesive bonding and coextrusion will also only occur at the interface between the layers.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

The reference to “heat” and “pressure” could just as well refer to ultrasound techniques of interfacial bonding.

It is pointed out that Kline et al. does not specifically teach or refer to “fusion bonding” or the formation of “fusion spots” or a “fusion method” as the Examiner clearly implies and infers.

It is misleading for the Examiner to state that Kline et al. teaches fusion bonding or the formation of fine fusion spots.

The only mention of the term “fusion” is Kline et al. is at column 19, lines 1-3 in reference to attaching the engaging component 202 to the ear panels.

Kline et al. teaches that reference numeral 250 identifies “individual bonding sites” which, based upon the express teachings of Kline et al., could clearly be areas where an adhesive or hot melt glue is applied.

Applicants’ submit that it goes beyond the teachings of Kline et al. to construe that the “individual bonding sites 250” of Kline et al. are “fine fusion spots” as the Examiner contends, especially when Kline et al. completely fails to teach fusion bonding.

It goes further beyond the teachings of Kline et al. for the Examiner to take the position that the “fine fusion spots” could be formed on either surface of the wings as an “obvious matter of design choice.”

This is not the case.

Kline et al. clearly does not teach such a structure or suggest such a structure.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

Applicants submit that the Examiner has gone so far outside of or beyond the teachings of Kline et al. that the Examiner's position is no longer supported by what Kline et al. actually teaches.

"Obviousness" cannot be determined from how a reference might be interpreted and how the teachings of a reference might be extrapolated to read on an applicant's claimed invention.

Rather "obviousness" as to do with what a reference, that is the teachings of a reference on its face, suggests to one of ordinary skill in the art.

Absent teaching fusion bonding, Kline et al. cannot be relied upon as teaching "fine fusion spots" let alone fusion bonding that allows one to selectively cause the fine fusion spots to bleed through a selected one of the exposed surfaces of the layers.

The Examiner states that:

...it would have been an obvious matter of design choice to one of ordinary skill in the art to have the fine fusion spots on the inner exposed surfaces of the wings because applicant has not disclosed that having the fine fusion spots on the inner exposed surfaces of the wings solves any stated problem or serves any particular purpose.

And that:

One of ordinary skill in the art would furthermore have expected Applicant's invention to perform equally well with either the fine fusion spots disposed on the outer surface of the claimed inner surface, as the fine fusion spots of both Kline and the instant invention serve the same purpose and perform the same function of providing increased strength and stiffness in areas of the bonds.

The Examiner seems to have forgotten that during the prosecution of the present application, applicants clearly addressed this issue by pointing out that applicants' invention provides fine fusion

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

spots on the inner "exposed" surfaces of the wings in order to secure the male mechanical fastening members in peelable engagement with the upper surface of the wings.

As discussed in the paragraph bridging pages 6 and 7 or applicants' specification:

These male members 22 are peelably engaged with respective fastener holding zones (out side regions) 41 as the fastener sections 21 are folded back onto the inner surface of the diaper (See Fig. 1).

The fine fusion spots secure portions of the fibers which form the wings and thereby provide engageable structures which cooperate with the male members 22.

Accordingly, there is a functional difference as to which surface the fine fusion spots are provided.

The Examiner's own position that there is no functional difference as to which surface the fine fusion spots are provided demonstrates that applicant's invention is not obvious at all, but rather involves both structural and functional differences over Kline et al. which are not apparent or appreciated in the prior art.

The Examiner's position that:

One of ordinary skill in the art would furthermore have expected Applicant's invention to perform equally well with either the fine fusion spots disposed on the outer surface of the claimed inner surface...

Clearly shows that applicants' invention would not be obvious to one skilled in the art based upon the teachings of Kline et al.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

Applicants' fine fusion spots only provide for mechanical engagement for the male members 22 on the side where the fine fusion spots are provided. If the fine fusion spots are provided on the opposite side the engagement structures would not be positioned where the male members 22 could engage them.

Based upon the above distinctions between Kline et al. the present invention, and the overall teachings of Kline et al., properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon Kline et al. as required under 35 U.S.C. §103 as anticipating applicants' claimed invention. It is, therefore, submitted that any reliance Kline et al. would be improper inasmuch as Kline et al. does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of Kline et al. and the outstanding rejection of the claims should hence be withdrawn.

Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.

If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved; the Examiner is invited to contact applicants' patent counsel at the telephonic number given below to discuss such issues.

Appl. No. 09/880,388
Amdt. Dated January 5, 2005
Reply to Office Action of October 5, 2004

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



Michael S. Gzybowski
Reg. No. 32,816

BUTZEL LONG
350 South Main Street
Suite 300
Ann Arbor, Michigan 48104
(734) 995-3110

121140.1